STATEMENT OF BASIS

as required by LAC 33:1X.3109 for LPDES facilities, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0069469; Al 9077; PER20070001 to discharge to waters of the State of Louisiana as per LAC 33:1X.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality

Office of Environmental Services

P. O. Box 4313

Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS: City

City of Shreveport

Woolworth Road Landfill Post Office Box 3602 Shreveport, LA 71133

H.

PREPARED BY:

Angela Marse

DATE PREPARED:

September 20, 2007

III.

PERMIT ACTION:

LPDES permit LA0069469, A19077

LPDES application received: July 19, 2007

NPDES permit issued:

January 29, 1988

NPDES permit expired:

January 29, 1993

NPDES permit application received:

October 13, 1992*

*In 2003 the Department received a letter from the permittee stating the facility no longer discharged leachate and contact stormwater, but transported the contaminated wastewater at the City's POTW. The permittee obtained coverage under the Multi-Sector General Permit to discharge stormwater associated with industrial activity. The Department inactivated permit LA0069469, so the permit was no longer valid. Because of new cell construction and anticipated discharge of leachate from that new cell, the permittee submitted a new LPDES permit application.

IV. <u>FACILITY INFORMATION:</u>

- A. The application is for the discharge of treated wastewaters including leachate, vehicle and equipment washwater, and contact stormwater, non-contact stormwater, and uncontaminated groundwater from a municipal solid waste facility serving the City of Shreveport and surrounding areas.
- B. The facility is located at 10580 Woolworth Road in Keithville, Caddo Parish.
- C. The treatment facility consists of an oxidation pond.
- D. Outfall 001

Discharge Location:

Latitude 32°21'19" North

Longitude 93°55'15" West

Description:

non-contact stormwater and deminimus amounts of

uncontaminated groundwater

LA0069469; AI9077; PER20070001

Page 2

Expected flow:

0.259 MGD

Type of Flow Measurement which the facility is currently using: engineering calculation

Outfall 002

Discharge Location:

Latitude 32º21'08" North

Longitude 93°54'48" West

Description:

non-contact stormwater and deminimus amounts of

uncontaminated groundwater

Expected flow:

0.178 MGD

Type of Flow Measurement which the facility is currently using: engineering calculation

Outfall 003

Discharge Location:

Latitude 32°21'29" North

Longitude 93°54'32" West

Description:

treated leachate, contact stormwater, vehicle and equipment washwater, stormwater runoff from curbed areas for fuel tanks, parking area, and wash rack area, and deminimus amounts of

uncontaminated groundwater

Expected flow:

0.027 MGD

Type of Flow Measurement which the facility is currently using: stop watch and bucket

Outfall 004

Discharge Location:

Latitude 32°21'56" North

Longitude 93°55'19" West

Description:

non-contact stormwater

Expected flow:

0.190 MGD

Type of Flow Measurement which the facility is currently using: engineering calculation

Outfall 005

Discharge Location:

Latitude 32°21'25" North

Longitude 93°54'16" West

Description:

non-contact stormwater

Expected flow:

0.024 MGD

Type of Flow Measurement which the facility is currently using: engineering calculation

LA0069469; A19077; PER20070001

Page 3

V. RECEIVING WATERS:

The discharge is into Boggy Bayou thence into Wallace Lake in Segment 100602 of the Red River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The critical low flow (7Q10) of the Boggy Bayou is 0.1 cfs. The hardness value is 74.8 mg/l and the fifteenth percentile value for TSS is 4 mg/l.

The designated uses and degree of support for Segment 100602 of the Red River Basin are as indicated in the table below. 1/2:

Overall Degree of Support for Segment	Degree of Su	pport of Each	Use				
Partial Support	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Fully Supported	Fully Suppored	Not Supported	N/A	N/A	N/A	Fully Supported

The designated uses and degree of support for Segment 100602 of the Red River Basin are as indicated in LAC 33:1X.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303 (d) of the Clean Water Act as amended by the Water Quality Act of 1987, and EPA's regulations at 40 CFR 130 require that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. Subsegment 100602 of the Red River Basin is on the 2004 Integrated 303(d) List of Impaired Waterbodies. The suspected causes of impairment are organic enrichment/low DO (EPA-Category 5) and nutrients (EPA-Category 5).

Suspected causes of concern are addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

Organic enrichment/low DO

BOD₅ is used as a method to measure the amount of dissolved oxygen in the waste stream utilized by organisms during the decomposition of organic material over a five day period. To protect against the discharge of oxygen depleting pollutants at levels that would cause in stream oxygen problems, BOD₅ limits have been placed in the permit. This is in accordance with the Final Effluent Guidelines at 40 CFR Part 445 for Landfills Point Source Category.

Nutrients

Nutrients take up oxygen in the stream making it less available for aquatic life. Examples of nutrients are ammonia nitrogen, nitrate/nitrite, and phosphorus. Monitoring for ammonia nitrogen is an indicator by which to monitor for the potential presence of nutrients remaining in a waste stream after the nitrification process has taken place. Effluent limits for ammonia nitrogen have also been placed in the permit in accordance with 40 CFR Part 445. They will protect against the potential introduction of nutrients into the receiving waterbody at levels which exceed state water standards.

LA0069469; AI9077; PER20070001

Page 4

To date no TMDLs have been completed for this waterbody. A reopener clause has been established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 100602 of the Red River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between LDEQ and the FWS, no further informal (Section7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered species or candidate species or their critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. <u>HISTORIC SITES:</u>

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

LA0069469; AI9077; PER20070001

Page 5

IX. PROPOSED PERMIT_LIMITS:

Final Effluent Limits:

OUTFALLS 001, 002, 004, and 005

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Outfalls 001, 002, 004, and 005 are for the discharge of non-contact stormwater. According to the 40 CFR 445. Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for Landfills Point Source Category final rule, non-contaminated stormwater includes stormwater which does not come in direct contact with landfill wastes, the waste handling and treatment areas, or wastewater that is subject to the limitations and standards. (Non-contaminated stormwater is also referred to as non-contact stormwater in this Document and Part I of the permit.)This includes stormwater which flows off the cap, cover, intermediate cover, daily cover, and /or final cover of the landfill or runoff from outside active areas of the landfill. Effluent limitations are set in accordance with the Multi-Sector General Permit, Sector L. for landfills. EPA believes that the stormwater MSGP or State equivalent adequately controls pollutants from stormwater runoff from covered areas of the landfill. In addition, the SWPPP (required by this permit and the MSGP) requires the landfill facility to identify all of the sources of stormwater contamination at the landfill and then implement measures and controls (ie: good housekeeping, sediment and erosion control) in an effort to prevent stormwater contamination. It should also be said that in the final rule EPA recognized that there may be some incidental contact with wastes when stormwater flows over a daily or intermediate cover. However, EPA concluded that such contact will not lead to any meaningful or significant "contamination" of the stormwater so long as the landfill complies with the requirements of the permit.

Effluent Characteristic	Monthly Avg.	Daily Max.	Basis
TOC		50mg/l	MultiSector General Permit – Sector L and previously issued water discharge permits for similar facilities/effluents.
Oil & grease		15 mg/l	MultiSector General Permit – Sector L and previously issued water discharge permits for similar facilities/effluents.
TSS		Report mg/l	MultiSector General Permit – Sector L and previously issued water discharge permits for similar facilities/effluents.
Total Recoverable Iron		Report mg/l	Multisector General Permit – Sector L and previously issued water discharge permits for similar facilities/effluents.

LA0069469; A19077; PER20070001

Page 6

Other Effluent Limitations for Outfalls 001, 002, 004, and 005:

1) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.)

2) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:1X.1113.B.7.

Final Effluent Limits:

OUTFALL 003

The previous permit for Woolworth Road Landfill was issued in 1988. The permit limits for Outfall 003 contained requirements for COD, TDS, TSS, oil and grease, BOD₅ priority metals and priority pollutants. COD is the amount of a specified oxidant that reacts with the sample under controlled conditions. Both organic and inorganic components of a sample are subject to oxidation. For this reason, it has been used as a measurement of pollutants in wastewater. Other related analytical values are biochemical oxygen demand, total organic carbon, and total oxygen demand. In a COD analysis, hazardous wastes of mercury, hexavalent chromium, sulfuric acid, silver, and acids are generated. For this reason, LDEQ is removing the previous limit from the permit and will use TOC as an indicator of organic carbon subject to oxidation. BOD is also limited at Outfall 003 to measure oxygen demand as required by EPA's Effluent Guidelines.

Final effluent limits for Outfall 003 are based on EPA's Effluent Limitations for Landfills Point Source Category. These guidelines were promulgated in 2000. According to the final rule wastewater associated with the landfills industry includes leachate, gas collection and condensate, drained free liquids, truck/equipment washwater, laboratory-derived wastewater, and contaminated stormwater. Leachate is defined as liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste. Gas collection and condensate is liquid which has condensed in a gas collection system during the extraction of gas from the landfill. Drained free liquids are aqueous wastes drained from waste containers (drums, trucks) or wastewater resulting from waste stabilization prior to landfilling. Landfills which accept containerized waste may generate this type of wastewater. Wastewater generated from these waste processing activities is collected and usually combined with other landfill generated wastewater for treatment. Truck and equipment washwater is generated during either truck or equipment washes at landfills. During routine maintenance or repair operations, trucks and/or equipment used within the landfill are washed and the resultant wastewater is collected from treatment. Laboratoryderived wastewater is generated from on-site laboratories which characterize incoming waste streams and monitor on-site treatment performance. Contaminated stormwater is stormwater which comes in direct contact with landfill wastes, the waste handling and treatment areas, or wastewater that is subject to the limitations and standards. Some specific areas may include the active/open face of the landfill (without cover), the areas around wastewater treatment operations, trucks, equipment, machinery that has been in direct contact with the waste, and waste dumping areas. Contaminated stormwater is referred to as contact stormwater in this document and the proposed permit. Outfall 003 at Woolworth Road Landfill will discharge treated leachate, treated contact stormwater, and vehicle and equipment washwater. Stormwater runoff from curbed areas

Fact Sheet LA0069469; A19077; PER20070001

Page 7

for fuel tanks, parking area, and wash rack area, and deminimus amounts of uncontaminated groundwater will also be discharged at outfall 003.

Effluent analysis from the July, 2007 application also indicated the presence of copper, lead, cadmium, and zinc in the Woolworth Road Landfill's effluent. A water quality screen was performed using stream characteristics for Bayou Boggy. This screen was used to establish water quality based limits intended as threshold action levels for priority pollutants in the permit. However, the screen indicated a water quality based limit was necessary for all four metals present in the application sampling. In the case of zinc, the EPA Guidelines are more stringent and thus will be applied at Outfall 003.

Final limits shall become effective on the effective date of the permit and expire on the expiration

date of the permit.

Effluent Characteristic	Monthly Avg.	Daily Max.	Basis
BOD₅	30 mg/l	45 mg/l	BPJ from the previously issued NPDES Permit LA0069469, January 30, 1988.
TSS		50 mg/l	BPJ from the previously issued NPDES Permit LA0069469, January 30, 1988.
Ammonia- Nitrogen	4.9 mg/l	10 mg/l	EPA's Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category.
Chlorides		250 mg/l	LAC 33:IX.1113.C.2 and BPJ from previously issued water discharge permits for similar facilities/effluents.
Sulfates		250 mg/l	LAC 33:IX.1113.C.2 and BPJ from previously issued water discharge permits for similar facilities/effluents.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
Total Cadmium	0.0019	0.008 mg/l	0.020 mg/l	Water Quality Effluent Limitation based on analytical effluent data and receiving waterbody data. See Appendix A and Appendix B-1.
Total Copper	0.004	0.018 mg/l	0.043 mg/l	Water Quality Effluent Limitation based on analytical effluent data and receiving waterbody data. See Appendix A and Appendix B-1.
Total Lead	0.005	0.020 mg/l	0.047 mg/l	Water Quality Effluent Limitation based on analytical effluent data and receiving waterbody data. See Appendix A and Appendix B-1.

LA0069469; A19077; PER20070001

Page 8

Effluent	Ī	i	<u> </u>	
Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
Alpha Terpineol		0.016 mg/l	0.033 mg/l	EPA's Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category.
Benzoic Acid		0.071 mg/l	0.12 mg/l	EPA's Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category.
p-Cresol		0.014 mg/l	0.025 mg/l	EPA's Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category.
Zinc		0.11 mg/l	0.20 mg/l	EPA's Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category.
Phenol		0.015 mg/l	0.026 mg/l	EPA's Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category.

Other effluent limitations for Outfall 003:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:1X.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

Fact Sheet <u>LA0069469</u>; A19077; <u>PER20070001</u> Page 9

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:1X.2645.C.)

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Toxicity Characteristics

Based on information contained in the permit application, LDEQ has determined there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream in violation of Section 101(a)(3) of the Clean Water Act. The State has established a narrative criteria which, in part, states that "No substances shall be present in the waters of the State or the sediments underlying said waters in quantities alone or in combination will be toxic to human, plant, or animal life..." (LAC 33:IX.113.B.3)

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0069469, Part II, Section D for the organisms indicated below.

TOXICITY TESTS

FREQUENCY

Chronic static renewal 7-day survival & reproduction test Using Ceriodaphnia dubia (Method 1002.0)

1/quarter

Chronic static renewal 7-day survival & growth test Using fathead minnow (Pimephales promelas) (Method 1000.0)

1/quarter

This frequency is based on recommendation by LDEQ Biomonitoring personnel (see attached recommendation) and the City's previous biomonitoring testing.

Dilution Series – The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in toxicity tests. These additional concentrations shall be 13%, 17%, 23%, 30%, and 40%. The low-flow effluent concentration (critical low-flow dilution) is defined as 30% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in Part II Section D under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in Part II Section D of the permit.

Fact Sheet <u>LA0069469</u>; AI<u>9077</u>; <u>PER20070001</u> Page 10

The permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or waterbody. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2383. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

5.) Priority Pollutants - General Comments

The treatment facility will be treating leachate, contaminated stormwater, vehicle and equipment washwater, stormwater runoff from parking and curbed areas around fuel tanks. Studies have shown the leachate generated at municipal solid waste landfills can be highly concentrated and variable, and may include the presence of priority pollutants. Contributing to this variability may be the presence of household hazardous waste in the municipal solid waste stream (EPA, 1987). Pollutants which may be found in leachate include volatile organic compounds, metals, and pesticides.

This Office has established a list of priority pollutants with threshold limits intended as action levels. Should a substance exceed the level of the established concentration, the Department is to be notified, in writing, within five (5) days of exceedance and Woolworth Road Landfill shall institute a study to determine the source of the substance. Within sixty (60) days of the written notification the permittee shall submit a written account of the nature of the study, the study results, and measures being taken to secure abatement.

Draft Threshold Limits - The draft threshold limits are derived from either technology-based effluent limits or State Water Quality Standards and requirements. The most stringent of these limits is contained in the permit. Technology-based effluent limitations are based on the applicable effluent limitations guidelines, on Best Professional Judgment (BPJ) in the absence of applicable guidelines, or on a combination of these two methods. Currently, there are guidelines for the treatment of leachate from a municipal solid waste landfill and they have been included in the permit in addition to these threshold values. This office intends to employ technology-based effluent limitations taken from previously issued BPJ based water discharge permits for municipal solid waste landfills and other land disposal facilities. Each of the guideline regulations were accompanied by a development document, which provided the support for the final guideline. A water quality screen was performed using stream characteristics for Boggy Bayou. This screen was used to establish water quality based limits.

2. Derivation of Threshold Limits

LDEQ/EPA Technology-Based Limits – In the early 1980's the LDEQ and EPA developed effluent limitations for all of the priority pollutants contained in the EPA 2C application for land disposal facilities. Although the limitations were technology-based and derived prior to formal State water quality criteria, water quality considerations played a significant role in the development of the limits.

Priority Metals and Pesticides – The threshold limits established for metals and pesticides are water quality based in accordance with the state water quality criteria (Appendix B-1). Metals for which state criteria have not been promulgated, threshold limits have been established using

Fact Sheet LA0069469; A19077; PER20070001

Page 11

technology-based effluent limits taken from water discharge permits previously issued to municipal solid waste landfills and other land disposal facilities. In accordance with the water quality standards, there may be no discharge of PCBs.

Chemical	DEQ/EPA	WQBL	Threshold	MQL
	Daily Max.	Daily Max.	Value	Required
	ug/l	ug/l	ug/l	ug/l
METALS, CYANIDE, AND TO		,		
Total Antimony	600		600	60
Total Arsenic	100	707	100	10
Total Beryllium	100		100	5
Chromium III	100		100	
Chromium VI	100	19	19	10
Total Cyanide	100	27	27	20
Total Mercury	10	0.22	0.22	0.2
Total Nickel (freshwater)	500	1269	500	40
Total Selenium	100		100	5
Total Silver	100		100	2
Total Thallium	100		100	10
Total Phenols	50	394	50	5
Acrolein	100		100	50
A 1 iaui1-				1 - 0
Acrylonitrile	100		100	50
Benzene	100	98	+	
		98 26	100	50
Benzene	100		100 98	50 10
Benzene Bromodichloromethane	100	26	100 98 26	50 10 10
Benzene Bromodichloromethane Bromoform	100 100 100	26 273	100 98 26 100	50 10 10 10
Benzene Bromodichloromethane Bromoform Carbon Tetrachloride	100 100 100 100	26 273	100 98 26 100 9	50 10 10 10 10
Benzene Bromodichloromethane Bromoform Carbon Tetrachloride Chlorobenzene	100 100 100 100 100	26 273	100 98 26 100 9	50 10 10 10 10 10 50
Benzene Bromodichloromethane Bromoform Carbon Tetrachloride Chlorobenzene Chloroethane	100 100 100 100 100 100	26 273	100 98 26 100 9 100 100	50 10 10 10 10 10 50
Benzene Bromodichloromethane Bromoform Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl vinyl ether	100 100 100 100 100 100 100	26 273	100 98 26 100 9 100 100 100	50 10 10 10 10 50 10 50
Benzene Bromodichloromethane Bromoform Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl vinyl ether Chloroform	100 100 100 100 100 100 100	26 273 9	100 98 26 100 9 100 100 100 100	50 10 10 10 10 50 10 50
Benzene Bromodichloromethane Bromoform Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl vinyl ether Chloroform Dibromochloromethane	100 100 100 100 100 100 100 100	26 273 9	100 98 26 100 9 100 100 100 100 40	50 10 10 10 10 50 10 50 10
Benzene Bromodichloromethane Bromoform Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl vinyl ether Chloroform Dibromochloromethane 1,1-Dichloroethane	100 100 100 100 100 100 100 100 100	26 273 9	100 98 26 100 9 100 100 100 40 100	50 10 10 10 10 50 10 50 10 10
Benzene Bromodichloromethane Bromoform Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl vinyl ether Chloroform Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethylene (1,1-Dichloroethene)	100 100 100 100 100 100 100 100 100	26 273 9	100 98 26 100 9 100 100 100 40 100 53	50 10 10 10 10 50 10 50 10 10 10
Benzene Bromodichloromethane Bromoform Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl vinyl ether Chloroform Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethylene (1,1-Dichloroethylene (1,1-Dichloroethene) 1,2-Dichloropropane	100 100 100 100 100 100 100 100 100	26 273 9 40	100 98 26 100 9 100 100 100 40 100 53	50 10 10 10 10 50 10 50 10 10
Benzene Bromodichloromethane Bromoform Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl vinyl ether Chloroform Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethylene (1,1-Dichloroethene) 1,2-Dichloropropane 1,3-Dichloropropene	100 100 100 100 100 100 100 100 100	26 273 9 40	100 98 26 100 9 100 100 100 40 100 53	50 10 10 10 10 50 10 50 10 10 10
Benzene Bromodichloromethane Bromoform Carbon Tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl vinyl ether Chloroform Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethylene (1,1-Dichloroethylene (1,1-Dichloroethene) 1,2-Dichloropropane	100 100 100 100 100 100 100 100 100	26 273 9 40	100 98 26 100 9 100 100 100 40 100 53	50 10 10 10 10 50 10 50 10 10 10 10 10

LA0069469; AI9077; PER20070001

Page 12

VOLATILE COMPOUNDS (cont	inued)			
Methyl Bromide	1			
(Bromomethane)	100		100	50
Methyl Chloride				
(Chloromethane)	100	67415	100	50
Methylene Chloride	100	686	100	20
1,1,2,2,-Tetra-chloroethane	100	14	14	10
Tetrachloroethylene	100	20	20	10
1,2-trans-Dichloroethylene	100		100	10
Toluene	100	1556	100	
1,2-trans-Dichloroethylene				
(1,2-dichloroethene)	100		100	10
1,1,1-Trichloroethane	100	6471	100	10
1,1,2-Trichloroethane	100	54	54	10
Trichloroethylene				
(Trichloroethene)	100	165	100	10
Vinyl Chloride	100	282	100	10
ACID COMPOUNDS				
2-Chlorophenol				10
(o-Chlorophenol)	100	316	100	
2,4-Dichlorophenol	100	247	100	10
2,4-Dimethylphenol	100		100	10
2,4-Dinitrophenol	100		100	50
4,6-Dinitro-o-Cresol				
{4,6-Dinitro-o-phenol}				1
{4,6-Dinitro-2-mehtyl phenol}	100		100	50
2-Nitrophenol	100		100	20
4-Nitrophenol	100		100	50
P-Chloro-M-Cresol	100		100	
Pentachlorophenol	100		100	50
Phenol	100		100	10
2,4,6-Trichlorophenol	100		100	10
PESTICIDES	1	10000	10000	1005
Aldrin	10	0.003	0.003	0.05
Chlordane	10	0.0014	0.0014	0.2
DDD	10	0.002	0.002	0.1
DDE	10	0.0014	0.0014	0.1
DDT	10	0.0014	0.0014	0.1
Dieldrin	10	0.0003	0.003	0.1
Endosulfan	10	0.105*	0.105*	0.1
Endosulfan	10	0.105*	0.105*	0.1
Total Endosulfan	1.0	0.21	0.21	0.1
Endosulfan sulfate	10	- 10105	10	0.1
Endrin	5	0.105	0.105	0.1
Endrin aldehyde	10		10	0.1

Fact Sheet <u>LA0069469</u>; AI<u>9077</u>; <u>PER20070001</u>

	3
Page 1	_

PESTICIDES (continued)				
Heptachlor	10	0.0006	0.0006	0.05
Heptachlor Epoxide	10	ĺ	10	0.05
Hexachlorocyclohexane -				
(BHC-)	10		10	0.05
Hexachlorocyclohexane -				
(BHC-)	10	1	10	0.05
Hexachlorocyclohexane -				
(BHC-)	10		10	0.05
Hexachlorocyclohexane –				
(Lindane)	10	1.15	1.15	0.05
Total PCB's	No disch	arge		1.0
Toxaphene	10	0.001	0.001	5.0
BASE/NEUTRAL COMPOUND	s		٠.	
Acenaphthene	100		100	10
Acenapthylene	100		100	10
Anthracene	100		100	10
Benzidene	100		100	50
Benzo(a)anthracene	100		100	10
3,4-Benzofluoranthene				
{Benzo(b)fluoranthene}	100	1	100	10
Benzo(k)fluoranthene	100	-	100	10
Benzo(a)pyrene	100		100	10
Benzo(ghi)perylene	100	1	100	10
Benzyl butyl Phthalate				
{Butyl benzyl Phthalate}	100	ļ	100	10
Bis(2-chloroethyl)ether	100		100	10
Bis(2-chloroethoxy) methane	100	1	100	10
Bis(2-ethylhexyl) Phthalate	100		100	10
Bis(2-chloroisopropyl) ether	100		100	10
4-Bromophenyl phenyl ether	100		100	10
2-Chloronaphthalene	100	1	100	10
4-Chlorophenyl phenyl ether	. 100		100	10
Chrysene	100		100	10
Dibenzo (a,h) anthracene	100		100	20
Di-n-Butyl Phthalate	100		100	10
1,2-Dichlorobenzene	100		100	10
1,3-Dichlorobenzene	100		100	10
1,4-Dichlorobenzene	100		100	10
{p-Dichlorobenzidine}				
3,3-Dichlorobenzidine	100		100	50
Diethyl Phthalate	100		100	10
Dimethyl Phthalate	100		100	10
2,6-Dinitrotoluene	100		100	10
2,4-Dinitrotoluene	100		100	10
Di-n-octyl Phthalate	100		. 100	10
1,2-Diphenylhydrazine	100		100	20

LA0069469; AI9077; PER20070001

Page 14

BASE/NEUTRAL COMPOUNDS (continued)				
Fluoranthene	100		100	10
Fluorene	100		100	10
Hexachlorobezene	100	0.099	0.099	10
Hexachlorobutadiene	100	0.868	0.868	10
Hexachlorocyclopentadiene	100		100	10
Hexachloroethane	100		100	20
ldeno (1,2,3-cd)pyrene	100		100	20
Isophorone	100		100	10
Naphthalene	100		100	10
Nitrobenzene	100		100	10
N-nitrosodimethylamine	100		100	50
N-nitrosodiphenylamine	100		100	20
N-nitrosodi- <i>n</i> -propylamine	100		100	20
Phenanthrene	100		100	10
Pyrene	100		100	10
1,2,4-Trichlorobenzene	100		100	10

* Chronic Value taken from the Water Quality Criteria Summary
Total Chromium has been removed from State Water Quality Standards and replaced with
criteria for Chromium III and Chromium VI, reference to Total Chromium has been
removed from the PPS tables.

A number of the threshold limitations established from the criteria are below EPA established minimum quantification levels (MQL). The MQL is accepted as the lowest concentration at which a substance can be quantitatively measured. Where the permit limits are below the MQL the following is noted in the permit:

If any individual analytical test result is less than the minimum quantification level (MQL) listed above, a value of zero (0) may be used as the test result for those parameters for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

X. <u>PREVIOUS PERMITS:</u>

NPDES Permit No. LA0069469: Issued:

January 30, 1988

Expired:

January 29, 1993

Outfall 001 and 002

Effluent Characteristic	Discharge Limitations		Monitoring Requirements		
	Daily Avg.	Daily Max.	Measurement	Sample	
			Frequency	Type	
Flow	Report	Report	l/week	Estimate	
COD		100 mg/l	1/month	Grab	
TDS		Report mg/l	1/month	Grab	
Oil & grease		15 mg/l	1/month	Grab	
pН			l/month	Grab	

LA0069469; AI9077; PER20070001

Page 15

Outfall 003

Effluent Characteristic	Discharge Limi	tations	Monitoring Requirements		
	Daily Avg.	Daily Max.	Measurement	<u>Sample</u>	
			Frequency	<u>Type</u>	
Flow	Report	Report	1/week	Estimate	
BOD ₅		30 mg/l	1/month	Grab	
COD		125 mg/l	1/month	Grab	
TSS		50 mg/l	l/month	Grab	
Oil & grease		15 mg/l	1/month	Grab	
TDS		Report	1/month	Grab	
pН			1/month	Grab	
Priority Metals			2/year	Grab	
Priority Organics			l/year	Grab	

The permit contains biomonitoring.

XI. <u>ENFORCEMENT AND SURVEILLANCE ACTIONS:</u>

A) Inspections

A review of the files indicates the following inspections were performed for this facility.

Date - December 29, 2006

Inspector - LDEQ

Findings and/or Violations -

- 1. An inspection was conducted to determine the status of the leachate/contact water holding pond. The holding pond is a two-cell structure. Freeboard was estimated at $1 1\frac{1}{2}$ feet.
- 2. No discharge was occurring at the time of inspection.

Date - January 3, 2007

Inspector - LDEQ

Findings and/or Violations -

- 1. The facility was discharging from the leachate pond. Effluent samples were collected for analysis.
- 2.No areas of concern were noted.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement actions administered against this facility:

LDEQ Issuance:

Docket # - WE-AO-07-0058 Date Issued – July 30, 2007

Findings of Fact:

1. Respondent owns and operates Woolworth Road Landfill.
Respondent was issued LWDPS Permit WP1469 effective October 2,
1987 (with an expiration of October 1, 1992) and NPDES Permit
LA0069469 effective January 30, 1988 (with an expiration date of
January 29, 1993). Respondent submitted a LPDES Permit Application
on or about July 17, 2007.

Fact Sheet <u>LA0069469</u>; A1<u>9077</u>; <u>PER20070001</u> Page 16

- 2. Around July 14, 2003 the Department was notified by the Respondent that the facility no longer discharged leachate and contact stormwater, but instead sent them to the City's POTW. However, the permittee wished to retain authority under the existing permit (albeit expired) in the event of an emergency.
- 3. On or about October 31, 2003 the Respondent submitted a NOI to discharge stormwater associated with industrial activities under the LPDES Multi-Sector General Permit. This permit has since been renewed and will expire April 30, 2011.
- 4. Based upon issuance of LAR05N510, elimination of landfill process wastewater discharges, and significant changes to the facility, the Department inactivated LPDES Permit LA0069469.
- 5. On or about April 24, 2004, Providence Engineering & Environmental Group, LLC submitted a NOI for the discharge of stormwater associated with construction activities of greater than 5 acres for landfill expansion.
- 6. Respondent submitted written correspondence requesting interim authorization to discharge treated leachate and contact stormwater from a new landfill cell through Outfall 003 until a final permit can be issued.
- 7. An inspection by the Department on or about January 3, 2007 revealed no areas of concern.
- 8. On or about February 8, 2007 Respondent notified the Department the types of wastewater received by outfall 003 and indicated completion of the hard-pipe connection to the POTW for leachate (containing K-listed waste) from older landfill cells.

Order:

- 1. Respondent was ordered to submit a completed application to the Department within thirty (30) days for the discharge of wastewaters and established interim effluent limits for the City to follow until a permit is issued based on the submitted application.
- 2. Respondent is required to submit notification to the Enforcement Division within fifteen (15) days of receipt of a final LPDES permit issued by the Department.

C) DMR Review

A review of the discharge monitoring reports for the period beginning May, 2005 through May, 2007 has revealed the following violations:

Effluent Characteristic TSS - (concentration)

Number of Violations

1

Fact Sheet <u>LA0069469</u>; A1<u>9077</u>; <u>PER20070001</u> Page 17

XII. <u>ADDITIONAL INFORMATION:</u>

PERMIT REOPENER CLAUSE

In accordance with LAC 33:1X.2361.C.3, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body. The Environmental Protection Agency will be conducting a TMDL in the Red River Basin Subsegment 100602. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit are standard for facilities of this type.

Stormwater Pollution Prevention Plan

If the permittee does not already have a Storm Water Pollution Prevention Plan (SWP3), then the permittee shall prepare, implement, and maintain a SWP3 within six (6) months of the effective date of the final permit. The terms and conditions of the SWP3 shall be an enforceable Part of the permit. Any runoff leaving the developed areas of the facility, other than the permitted outfall(s), exceeding 50 mg/L TOC, 15 mg/L Oil and Grease, or having a pH less than 6.0 or greater than 9.0 standard units shall be a violation of this permit. Any discharge in excess of these limitations, which is attributable to offsite contamination, shall not be considered a violation of this permit. A visual inspection of the facility shall be conducted and a report made annually as described in. Part II, Section B of the permit.

If the permittee does already have a Storm Water Pollution Prevention Plan, the Plan should be reviewed for compliance with Part II, Section B of the permit and updated if necessary.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in this Statement of Basis.

Fact Sheet <u>LA0069469</u>; Al<u>9077</u>; <u>PER20070001</u> Page 18

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

<u>Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2004.</u>

<u>Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality</u>
<u>Regulations, Subpart 2 - "The LPDES Program"</u>, Louisiana Department of Environmental Quality, 2004.

<u>Low-Flow Characteristics of Louisiana Streams</u>, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

<u>Index to Surface Water Data in Louisiana</u>, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

<u>LPDES Permit Application to Discharge Wastewater</u>, City of Shreveport, Woolworth Road Landfill, July 18, 2007.